

ABSTRACT OF THE DISCLOSURE

An apparatus and method for transferring data stored in a memory to another memory, and an apparatus and method for shifting data by the specified number of bits at a time of transferring data and transferring the shifted data to another memory. The
5 conventional direct memory access (DMA) device sequentially stores data from the first area of a memory address when the data is read from the first memory and the read data is stored in the second memory. Values are set in a control register of the DMA device so that the data is shifted by the specified number of bits at a time of transferring data and the shifted data is transferred in accordance with the described method. Specified data is
10 shifted according to a predetermined value set in the control register and the shifted data is transferred to another memory.